Determination 2005/60

Refusal of a code compliance certificate for a building with a "monolithic" cladding system: House 52

1 THE DISPUTE TO BE DETERMINED

- 1.2 This is a determination by the Chief Executive of the Department of Building and Housing ("the Chief Executive") under section 17 of the Building Act 1991 ("the Act"), as amended by section 424 of the Building Act 2004. The applicant was the original owner (referred to throughout this determination as "the owner") and the other party is the territorial authority. The application arises from the refusal by the territorial authority to issue a code compliance certificate for a 3-year old house unless changes are made to its monolithic cladding system.
- 1.3 My task in this determination is to consider whether I am satisfied on reasonable grounds that the external monolithic wall cladding as installed ("the cladding") on the walls and columns of this house complies with the building code (see sections 18 and 20 of the Act). By "external monolithic wall cladding as installed", I mean the components of the system (such as the backing sheets, the flashings, the joints and the plaster and/or the coatings) as well as the way the components have been installed and work together.
- 1.4 This determination is made under the Building Act 1991 subject to section 424 of the Building Act 2004. That section came into force ("commenced") on 30 November 2004, and its relevant provisions are:
 - ". . . on and after the commencement of this section,—
 - "(a) a reference to the Authority in the Building Act 1991 must be read as a reference to the chief executive; and
 - "(b) the Building Act 1991 must be read with all necessary modifications to enable the chief executive to perform the functions and duties, and exercise the powers, of the Authority"

It should be noted that the new legislation does not amend the determination process set out under the 1991 Act, other than to transfer the power to make a determination from the Building Industry Authority ("the Authority") to the Chief Executive.

- 1.5 This determination refers to the former Authority:
 - (a) When quoting from documents received in the course of the determination, and
 - (b) When referring to determinations made by the Authority before section 424 came into force
- 1.6 No other aspects of the Act or the building code have been considered in this determination.
- 1.7 The house itself is described in paragraphs 2.1 to 2.3, and paragraph 8 sets out the final decision.

2 PROCEDURE

The building

- 2 1 The building is a two-storey house with a single storey attached garage situated on a sloping excavated site in a spray and very high wind zone in terms of NZS 3604: 1999 "Timber framed buildings". The house, which is of conventional light timber frame construction on a concrete block foundation wall, is of a relatively simple shape, with roofs at two main levels. The external framing is sheathed in monolithic cladding and there are two lengths of roof/wall intersections. There is one large and two small balconies at the upper level. One of the smaller balconies is built entirely over a living space and the larger balcony, which extends round two elevations, is constructed partly over a living space. The balconies have a reinforced acrylic membrane deck cladding, and are supported on timber beams and monolithic clad timber columns. The timber framing encasing the Tanalised post under the cladding around the columns is untreated. Rainwater to the larger balcony is discharged over the edge of the decking, and the smaller balconies have formed edge upstands that channel rainwater into external rainwater heads. The columns extend past the deck level to either support the roofs over, or to form capped supports for the infill balustrades. The balcony balustrades are constructed from powder-coated aluminium and are secured to the columns and the decking. There are two pergolas fixed to the cladding on one elevation, each consisting of timber rafters and beams supported on two monolithic-clad columns. The columns sit on plastered concrete plinth footings. The eaves and verges have 500 mm wide projections, and the main roof is extended fully over one of the small balconies and over the majority of the large balcony. I note that the membrane as applied to the balcony decks differs from the butyl-rubber membrane shown on the plans.
- As no evidence has been produced as to the treatment of the timber used for the external wall construction, I accept that it is kiln dried and untreated.

- 2.3 The cladding system is what is described as monolithic cladding. As specified in its manufacturer's July 1995 technical information manual ("the manufacturer's instructions"), it incorporates fibre-cement backing sheets fixed through the building wrap directly to the framing timbers and finished with a choice of joint and coating systems. The manufacturer's instructions include details for flashings at various junctions (but not all of the junctions actually present in the house). For the purposes of this determination, the manufacturer of the fibre-cement sheets and the flashing kit is regarded as the manufacturer of the system, despite the fact that each of the joint and coating systems is itself proprietary to one of other manufacturers. The manufacturer's instructions identify the joint and coating systems by reference to an independent appraisal but give no other information about them. No evidence has been provided to show whether the sealing, or the textured coating, or the painting, was one of those systems nominated by the manufacturer. The building plans also show the head, jamb and sill details for the exterior joinery units.
- 2.4 The owner provided a producer statement, dated 10 March 2004, from the plasterer that covered the jointing and textured sponge finish, and which stated that the workmanship was "covered" for five years.

Sequence of events

- 2.5 The territorial authority issued a building consent on 15 June 2001, based on a certificate supplied by a building certifier.
- 2.6 According to the owner, the building certifier made various inspections, including a cladding pre-plaster inspection, during the course of construction.
- 2.7 The building certifier carried out an inspection of the house on 5 January 2004, and issued an interim code compliance certificate, dated 6 March 2004, which stated;

This is:

An interim code compliance certificate in respect of part only of the building work under the above building consent as specified below:

Unit 1

All Building work, but excluding outer wall cladding.

- 2.8 The owner wrote to the territorial authority on 4 June 2004, expressing concern at the delay in obtaining a code compliance certificate, and pointing out that the house had been completed for 3 years. The owner also stated that the house was constructed to a standard specified in the consent, all the relevant inspections had been taken out, and there were no problems with weathertightness.
- 2.9 The territorial authority sent a letter, dated 2 July 2004 to the owner, which stated that:

We have received an Interim Code Compliance Certificate from [the building certifier] dated 6 March 2004, which excludes the exterior cladding.

I am advising Council is unable to issue a full Code Compliance Certificate for this consent, as we were not invited to inspect the cladding during construction.

To assist with our assessment of this consent we require a full report on the exterior cladding confirming it complies with the Building Code. The report is to be supplied by a [named organisation adviser] (list attached)...

We reserve the right to issue further requisitions as may be required to bring this consent to a satisfactory conclusion.

- 2.10 The territorial authority did not issue a Notice to Rectify as required under section 43(6) of the Act.
- 2.11 The owner applied for a determination on 11 July 2004.

3 THE SUBMISSIONS

- 3.1 The owner, under the "Matter of Doubt or Dispute", summarised the background leading up to this determination. On 5 August 2004, the owner wrote to the Authority and provided more background information and details of the architect and the builder.
- 3.2 The owner provided copies of:
 - The building plans;
 - Correspondence with the territorial authority;
 - The interim code compliance certificate;
 - The plasterer's producer statement;
 - A new home guarantee issued by a building association; and
 - Two photographs of the building under construction.
- 3.3 The territorial authority wrote to the Authority on 21 July 2004, acknowledging the receipt of documents. The letter went on to say:

The letter from Council dated 2 July 2004 [to the owner] is the subject of a determination.

The letter is not entirely clear, however it sets out Council's intention as follows:

Because Council was not invited to carry out any cladding inspection, Council will require a specialist report to assess the building with particular referral to the New Zealand Building Code E2 requirements prior to considering the issue of a Code Compliance Certificate.

The letter does not address the option of the Council organising such a report itself and passing the cost on to the consent holder.

Council would appreciate clarification as to what is to be adjudicated. We presume that it is Council's right to seek a specialist report prior to making a decision on a request for a Code Compliance Certificate.

The issue of the assessment of photographic evidence, and the interim code compliance certificate issued by [the building certifier] is a matter that can be dealt with in the specialist report.

Please note that this Council has not declined to inspect the cladding of the dwelling. Having limited resources Council has a policy to obtain specialist reports in the event Council has not been invited to carry out cladding and associated inspections...

- 3.4 The copies of the submissions and other evidence were provided to each of the parties.
- Following the issue of the Draft Determination, the owner wrote to the Authority on 21 December 2004. The owner's submission is summarised as being:
 - The moisture problem caused by the adjacent retaining wall could be rectified;
 - The handrail posts could be sealed with fibreglass to ensure a watertight joint and sealant can be applied to junctions with the cladding;
 - The cracking to the east elevation plinth is cosmetic only, has no structural component, and can readily be removed;
 - The moisture readings in the columns appear to be related to the handrail installation. Due to its construction, it is unlikely that the integrity of the deck will be compromised;
 - The deck is roofed [over] and extensive rotting would need to occur before its structural integrity was affected. The cantilevered portion could be opened up to ensure constant monitoring;
 - The owner was apprehensive about installing control joints that could destroy the existing weatherproof cladding; and
 - The owner was unaware of any request from the territorial authority to view the cladding during construction. The only inspection of the property made by the territorial authority that the owner was aware of, was in relation to the consent application.
- 3.6 The territorial authority wrote to the Department on 5 January 2005. This letter described three issues that the territorial authority wished the Department to consider:
 - Remove any reference to Council refusing to issue a code compliance certificate. Council sought a specialist report before considering issuing a notice to rectify.
 - 2. Remove the comment associated with the waterproofing membrane. The only reason this was raised was because it was in your specialist report.
 - 3. Remove the comments in relation to ongoing maintenance in paragraph 7.4

The territorial authority enlarged on these issues in its letter.

3.7 The territorial authority did not comment on the owner's submissions. In a letter to the Department dated 5 April 2005, the owner commented on the question of foundations and expressed concerns regarding the delays in reaching a final

agreement on what remedial work is required to be undertaken. I have considered these additional submissions and comments in formulating the final draft of this determination.

4 THE RELEVANT PROVISIONS OF THE BUILDING CODE

4.1 The dispute for determination is whether the territorial authority's decision to refuse to issue a code compliance certificate because it was not satisfied that the cladding complied with clauses B.3.1 and E2.3.2 of the building code (First Schedule, Building Regulations 1992) is correct. Those provisions of the building code say:

Clause B2—DURABILITY

- **B2.3.1** Building elements must, with only normal maintenance, continue to satisfy the performance requirements of this code for the lesser of the specified intended life of the building, if stated, or:
- (a) The life of the building, being not less than 50 years, if:
- (i) Those building elements (including floors, walls, and fixings) provide structural stability to the building, or
- (ii) Those building elements are difficult to access or replace, or
- (iii) Failure of those building elements to comply with the building code would go undetected during both normal use and maintenance of the building.
- (b) 15 years if:
- (i) Those building elements (including the building envelope, exposed plumbing in the subfloor space, and in-built chimneys and flues) are moderately difficult to access or replace, or
- (ii) Failure of those building elements to comply with the building code would go undetected during normal use of the building, but would be easily detected during normal maintenance.

Clause E2—EXTERNAL MOISTURE

- **E2.1** The objective of this provision is to safeguard people from illness or injury, which could result from external moisture entering the building.
- **E2.2** Buildings shall be constructed to provide adequate resistance to penetration by, and the accumulation of, moisture from the outside.
- **E2.3.2** Roofs and exterior walls shall prevent the penetration of water that could cause undue dampness, or damage to building elements.
- 4.2 There are no Acceptable Solutions that have been approved under section 49 of the Act that cover this cladding. The cladding is not accredited under section 59 of the Act. I am therefore of the opinion that the cladding system as installed can be considered to be an alternative solution.
- 4.3 In several previous determinations, the Authority has made the following general observations, which in my view remain valid in this case, about acceptable solutions and alternative solutions:

- Some acceptable solutions cover the worst case, so that in less extreme cases they may be modified and the resulting alternative solution will still comply with the building code.
- Usually when there is non-compliance with one provision of an acceptable solution, it will be necessary to add some other provision to compensate for that in order to comply with the building code.

5 THE EXPERT'S REPORT

- Because the information provided by the parties contained insufficient detail on how the building had been constructed, the Authority commissioned an independent expert ("the expert") to inspect and report on the cladding. The expert inspected the building and furnished a report. It noted that the coating finish to the cladding was finished to a generally good standard. The exterior joinery units have head flashings that project 20 mm beyond the jambs and the jambs are adequately sealed. The expert cut away sections of the cladding at a window jamb and at a section of the mid-floor band in order to check these areas. The expert also removed the small vents to the base of 2 columns to inspect the internal construction. The expert was unable to ascertain whether the balcony deck framing timbers were treated. The expert's report made the following specific comments about the cladding:
 - The vertical control joints as required by the manufacturer's recommendations have not been installed;
 - There is cracking to the western wall and below the balcony deck on the southern wall;
 - Where the polystyrene mid-floor band adjoins a barge board, there is an air gap and the cladding is not sealed at this junction;
 - At some locations, the moisture break clearance between the base of the cladding and the foundation wall is only marginal;
 - The appropriate ground clearances to the base of the cladding have not been achieved at the base of the post columns, at both sides of the garage door, at the entry steps, and where the garden areas are formed below the claddings;
 - There are no sill flashings to the exterior joinery units;
 - The string plate to one of the pergolas is bolted and nailed directly through the cladding, no flashing has been installed at this location, and the junction is inadequately sealed;
 - The cladding at the column bases has no moisture breaks, and the cladding to some columns are partially covered with concrete with the base framing at these locations situated below the top of the concrete plinth;

- Two of the column bases show cracks between the original concrete and the subsequent plaster topping;
- Some pipe penetrations through the cladding are inadequately sealed;
- There is no flashing around the meter box;
- The deck membrane to the small lounge balcony is creased and puckered, which indicates some differential movement in the substrate;
- The deck membrane to both the smaller balconies has its edges turned down and fixed over an aluminium angle flashing. The cladding to the edge of the deck below and underneath the flashing is not sealed to the flashing. In addition, the ends of the flashings are partially buried in the textured finish;
- The balcony balustrade handrail base brackets are surface mounted, the fixings are penetrating the membrane, and the balustrade wall brackets and fixings are not sealed at the cladding junctions; and
- The blockwork garden wall on the west elevation is sited too close to the timber framed wall to allow for a clear drainage path between the retaining wall and the cladding.
- 5.2 The expert took numerous moisture readings using both a non-invasive meter and an invasive meter. Moisture levels above 18% recorded after cladding is in place generally indicate that external moisture is entering the structure. The readings above 18% were:
 - Six readings between 22% to 24% under the large balcony balustrade post brackets and curved section soffit;
 - Two readings of 22% and 23% at one corner column on the south elevation
 - One reading of 20% at the base of one column on the east elevation; and
 - One reading of 26% at one of the smaller balcony balustrade post brackets; and
 - One reading of 24% at the lower lounge bottom plate, adjacent to the blockwork retaining wall.

I note that with one exception, all of the above moisture readings relate to the balcony.

- Copies of the expert's report were provided to each of the parties. There was no response from the owner, but the territorial authority made various comments in a letter to the Authority, dated 8 November 2004. As some of these comments are about issues that are outside the scope of this determination they cannot be covered here. In general terms, the territorial authority comments that are relevant to this determination are:
 - A request for clarification as to what is being adjudicated in this determination;

- The territorial authority was unclear as to what the expert considered to be normal or abnormal moisture readings;
- The drawings show butyl rubber membrane and the territorial authority did not consider that an acrylic membrane was a similar product;
- While the lack of control joints may not necessarily be a problem, the questions relating to the effects of ground movement on the cladding should be assessed;
- It would be appropriate to analyse whether the observed cracking was attributable to non-compliance with the manufacturer's instructions;
- There should be a further inspection of areas showing a higher moisture content; and
- The report should have dealt with matters of ongoing cladding maintenance.
- 5.4 The territorial authority's has sought confirmation of the matter of doubt or dispute that is being adjudicated in this determination. I note that the territorial authority has refused to issue a code compliance certificate on the grounds that it has been unable to verify whether the cladding on this house complies with the relevant provisions of the building code. Accordingly, I consider that the owner is applying for a determination relating to the refusal of a territorial authority to issue a code compliance certificate under Section 17(1)(b) of the Act and that the issues to be determined relate to code compliance.
- I have dealt with the other issues raised by the territorial authority in the body of this determination as follows:
 - Abnormal moisture readings in paragraph 5.2;
 - The deck membrane in paragraph 7.3;
 - Control joints and cracking in paragraph 6.8;
 - Further moisture content investigations in paragraph 7.4; and
 - Maintenance and the responsibilities of the parties in paragraphs 7.4 and 8.3.

6 DISCUSSION

General

6.1 I have considered the submissions of the parties, the expert's report and the other evidence in this matter. The approach in determining whether building work complies with clauses B2/AS1 and E2.3.2, is to examine the design of the building, the surrounding environment, the design features that are intended to prevent the penetration of water, the cladding system, its installation, and the moisture tolerance of the external framing.

Weathertightness risk

- Recent research and experience, both internationally and locally, indicates that the impact of weathertightness problems in monolithic clad houses can be minimised if good and effective design and construction practices are followed.
- 6.3 The installation of exterior cladding to manufacturer's specifications and to accepted good trade practice is an important but not the only requirement to ensure good weathertightness performance.
- 6.4 The next priority is to reduce the ability of moisture to get through the cladding by using design measures that minimise the effects of the rain impacting on the walls:
- 6.5 Important matters for consideration are:
 - Data show a strong relationship between the width of the eaves and the incidence of wall leaks. An effective deflection mechanism, such as eaves greater than 600 mm wide, has been shown by Canadian data to manage more than 90% of rain incidence;
 - While most reported leaks are substantially caused by defects in the cladding that require little or no wind pressure differential, I believe that buildings in high and very high wind zones (as defined by NZS 3604) are likely to experience wind pressure differentials and thus a higher risk of water ingress;
 - Taller buildings result in an effective increase in the catchment area of the wall.
 Available data suggests a clear correlation between higher number of storeys and an increased incidence of leaking;
 - Complex roofs and overall envelope shapes where the roofs frequently intersect with the walls on upper floors create opportunities for leaks to directly penetrate into the wall; and
 - Recent data also shows that decks and balconies that are exposed in plan and/or cantilevered from the external walls are the most frequent location for water leaks.
- Any likely penetration of moisture through the cladding can then be countered by a combination of effective drainage, ventilation of the drainage cavity and moisture tolerance in the external wall framing timber. In particular:
 - The structure should allow water that has penetrated the cladding to drain out as quickly as possible. I believe that generally a drainage cavity should be provided behind the outer cladding barrier in monolithic construction;
 - The design of the outer walls should allow walls to dry to the outside once moisture penetrates the cladding and the moisture barrier. If walls do not dry, decay fungi can become established in as little as 3 months. Until scientific data on the optimum depth and configuration of the ventilation mechanism in New Zealand conditions is available. I consider that the drainage cavity should be not less than 20 mm deep; and

- The external walls should have some degree of decay resistance or moisture tolerance to allow for situations when moisture circumvents the cladding and moisture barriers and moisture levels in the timber rise to more than 18%.
- 6.7 In relation to these characteristics, I find that this house:
 - Has 500mm wide eaves and verge projections that provide good protection to the cladding, and in addition, two the balconies have roof projections over them;
 - Is in a very high wind zone;
 - Is two stories high;
 - Has flashings to the heads and sealant to the jambs of the exterior joinery units, but there are no sill flashings installed,
 - Has an overall envelope that is relatively simple on plan;
 - Has only two roof/cladding junctions;
 - Has three upper-level balconies, one of which is partly constructed over a living space, and another which is entirely constructed over a living space; and
 - Has external walls that are constructed with untreated timber that is likely to decay if it absorbs and retains moisture.

Weathertightness performance

- 6.8 Generally, the cladding appears to have been installed according to good trade practice and to the manufacturer's instructions, but some junctions, edges, and insertions are not well constructed. These areas are:
 - The absence of vertical control joints, which were an area of concern to the territorial authority when it commented on the expert's report;
 - The cracking to the western wall and below the balcony deck on the southern wall;
 - The air gap and the lack of sealing to the cladding where the polystyrene midfloor band adjoins a barge board;
 - The marginal moisture break clearance between the base of the cladding and the foundation wall;
 - The insufficient ground clearances to the base of the cladding at the base of the post columns, at both sides of the garage door, at the entry steps, and where the garden areas are formed below the claddings;
 - The string plate to one of the pergolas is bolted and nailed directly through the cladding without a flashing, and the junction is inadequately sealed;

- The cladding at the column bases has no moisture breaks, and the cladding to some columns are partially covered with concrete;
- Two of the column bases show cracks between the original concrete and the subsequent plaster topping;
- Some pipe penetrations through the cladding are inadequately sealed;
- There is no flashing around the meter box;
- The issues relating to the balconies, including the edge flashings and the balustrade handrail base brackets; and
- The blockwork garden wall on the west elevation is sited too close to the timber-framed wall.
- 6.9 Notwithstanding the fact that the backing sheets are fixed directly to the timber framing, thus inhibiting drainage and ventilation behind the cladding sheets, I find that there are compensating factors that assist the performance of the cladding in this particular case. These are:
 - Generally, the cladding appears to have been installed according to good trade practice and to manufacturer's specifications;
 - The house has wide eaves projections and roof extensions over two of the balconies; and
 - The house has an overall envelope that is relatively simple on plan.
- 6.10 I am aware that there are no sill flashings to the exterior joinery units. However, as the expert has found the jambs and sills of the units to be efficiently sealed, I consider that these details will perform adequately to prevent the ingress of moisture.
- I have not been given any evidence that the building certifier or the owner invited the territorial authority to inspect the cladding throughout the preliminary stages of its installation. Had this happened, the territorial authority would have had sufficient information to make its own decisions on cladding code compliance. I support the territorial authority's intended approach to seek a specialist's report prior to making a decision on a code compliance certificate. It notes that the territorial authority is able to make whatever inspections it considers necessary to assess code compliance and to recover reasonable costs from the building consent holder. This approach would have given the territorial authority immediate access to a condition report on the cladding that would have enabled it to also make its own decision on cladding code compliance.
- I note that all elevations of the building demonstrate a medium weathertightness risk rating as calculated using the E2/AS1 risk matrix. The matrix is an assessment tool that is intended to be used at the time of application for consent, before the building work has begun and, consequently, before any assessment of the quality of the building work can be made. Poorly executed building work introduces a risk that cannot be taken into account in the consent stage, but must be taken into account

- when the building as actually built is assessed for the purposes of issuing a code compliance certificate
- 6.13 The Authority has previously issued a public warning about the dangers presented by balconies that might be affected by timber decay. The concerns identified by the expert concerning all the balconies and some of the columns that support them are all matters that might affect the performance of timber used in the balcony structures; especially if the use of untreated framing timber is confirmed. While accepting that the main support posts are likely to be Tanalised, I am concerned that there are the high moisture readings at the top of the columns. This is indicative of moisture ingress that could affect the balcony support framing and the adjoining wall framing. I therefore strongly recommend that the territorial authority use the powers available to it under section 65 of the Act to ensure the balconies present no safety hazards.

7 CONCLUSION

- 7.1 I am satisfied that the performance of the cladding has been reduced because it is currently allowing water penetration into the wall framing at one location. Consequently, I am not satisfied that the cladding system as installed complies with clause E2.3.2 of the building code.
- 7.2 I find that, because the faults that have been identified with this cladding occur in discrete areas, I am able to conclude that satisfactory rectification of the items outlined in paragraph 6.8 is likely to result in the building being weathertight and in compliance with clauses B2 and E2, notwithstanding the lack of a ventilated cavity.
- 7.3 I note that effective maintenance of monolithic claddings is important to ensure ongoing compliance with clause B2 of the building code. That maintenance is the responsibility of the building owner. The code assumes that the normal maintenance necessary to ensure the durability of the cladding is carried out. For that reason clause B2.3.1 of the building code requires that the cladding be subject to "normal maintenance". That term is not defined and I take the view that it must be given its ordinary and natural meaning in context. In other words, normal maintenance of the cladding means inspections and activities such as regular cleaning, re-painting, replacing sealants, and so on.
- 7.4 I emphasise that each determination is conducted on a case-by-case basis.

 Accordingly, the fact that a particular cladding system has been established as being code compliant in relation to a particular building does not necessarily mean that the same cladding system will be code compliant in another situation.
- 7.5 I decline to incorporate any waiver or modification of the building code in its determination.

8 THE DECISION

- 8.1 In accordance with section 20 of the Building Act 1991 I hereby determine that the cladding system as installed does not comply with clause E2.3.1 of the building code. There are also a number of items to be remedied to ensure that the building remains weathertight and thus meet the durability requirement of the code. Consequently, I find that the house does not comply with clause B2. Accordingly, I confirm the territorial authority's decision to refuse to issue a code compliance certificate. In respect of this, the territorial authority does not consider that it has refused to issue a code compliance certificate as it sought a specialist report before considering a Notice to Rectify. However, the fact remains that as set out in the letter from the territorial authority to the owner dated 2 July 2004 (see paragraph 2.9), the owner was advised, "Council is unable to issue a full Code Compliance Certificate". I cannot interpret this statement as other than a refusal to issue the code compliance certificate.
- 8.2 I find that because the faults that have been identified with this cladding occur in discrete areas, it is able to conclude that rectification of the items outlined in paragraph 6.8 to the approval of the territorial authority, along with any other faults that may become apparent in the course of that work, is likely to result in the building being weathertight and in compliance with clauses B2 and E2, notwithstanding the lack of a ventilated cavity.
- 8.3 I note that the territorial authority has not issued a Notice to Rectify. The territorial authority should do so and the owner is then obliged to bring the house up to compliance with the building code. It is not me to decide directly how the defects are to be remedied and the cladding brought to compliance with the building code. That is a matter for the owner to propose and for the territorial authority to accept or reject, with either of the parties entitled to submit doubts or disputes to the Chief Executive for another determination.
- 8.4 I consider that the cladding on the building will require on-going maintenance to ensure its continuing building code compliance.

Signed for and on behalf of the Chief Executive of the Department of Building and Housing on 4 May 2005.

John Gardiner **Determinations Manager**